

Review

The win-win paradigm: A unique and innovative project of community-based schooling system at Northwestern Polytechnical University (NPU), China

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This paper presents the concept, results and the project execution and evaluation of an innovative and novel, community-based schooling system established by the foreign students of Northwestern Polytechnical University (NPU), Xi'an, China at the university campus for the children of foreign students under the patronage of university administration. The authors conceived the idea to institute a community-based education system for the school-going children of the foreign students after analyzing their intellectual and emotional quotients. The project was executed purely on the basis of project management principles and this paper contributes in showcasing the whole concept behind this project. This paper was written after evaluating the performance of all the stake holders involved and a role model is presented here to be replicated in alike scenarios. This paper also spot lights the phenomenal improvement in the five quotients of the school-going children namely: intelligence, emotional, physical, cultural and spiritual.

Key words: Community-based schooling system, quotients, project management, school, foreign students, China.

INTRODUCTION

Northwestern Polytechnical University (NPU), Xi'an (www.nwpu.edu.cn) is one of the best universities of China and is imparting education in the field of Aerospace Science and Engineering. The value of internationalizing higher education is increasingly recognized as an important element of higher education today, due to the strong link between research and education to the globalization of societies and economies around the world (Oyler, 2009). At present, many students are enhancing their knowledge base while residing in foreign countries. This trend has been remarkably increased in the last decade due to availability of numerous scholarships, ever-increasing concept of globalization and knowledge sharing trend.

During the years of the new millennium, globalization has gained significant momentum; now geographical and cultural distances are no longer obstacles preventing the people who share this planet from sharing also ideas, knowledge, goals, and concerns for the future (Culcer, 2009). Asia is the continent developing the education sector more profoundly (De Miguel and Zamora, 2007).

China also provides a platform for disseminating updated information and transfer of knowledge to countless foreign students in all disciplines, especially in the field of Aerospace and Communications Engineering. Several foreign students from Pakistan, Arab States, African States and Russian states are residing in China for graduate and post graduate studies.

Northwestern Polytechnical University, Xi'an, China is the host to many foreign students, since long. Pakistani students constitute a major portion, engaged in their MS and PhD studies. In the year 2009, there were fifteen families of MS/PhD students living in the Foreign Student Apartments inside the NPU. They had fifteen children ranging between three to seven years of age-groups. Only two of them were enrolled in the Chinese Schooling System but were facing the problem of catching-up the Pakistani schooling curricula (www.moe.gov.pk) on their

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return to home country, after a considerable period of 3 - 4 years. Language and cultural issues are also some other factors. The English (Private) schooling system, being quite expensive, was not within means of the scholarship holders.

The children living in small apartments were becoming aggressive and psychologically distressed due to absence of any routine and/or planned activity, although the parents were teaching their kids at home but in an unsystematic manner and during odd timings. Also, there was an impending fear of their maladjustment in the proper schooling system, while going back to Pakistan. In this backdrop, the authors conceived a win-win paradigm (Stephen, 2004), a novel idea with futuristic approach to establish a proper schooling system especially for the children of Pakistani students to prepare them for the incoming years with a view to develop their intelligence, emotional, physical, spiritual and cultural quotients, help get-rid of the psychological trauma and furnish them an ideal ambience to grow-up along with their peer-group.

This paper got the inspiration and ideas from several sources especially Simon (2009), Lo (2009), Rakow (2009), Larson (2006), Brown (2003), Huang (2009), Li-Grinning (2003) and Dumais (2004). It is structured in such a way that it should elaborate the project in a progressional way, so that anyone in a similar situation can replicate the model. Subsequently, this study shows the Strength, Weaknesses, Opportunities and Threats (SWOT) analysis of this project, after which it explains the inception and evolution of the project, highlighting the concepts, problems and solutions related to Academics and Curriculum selection. Further, it illustrates the inaugural hype and then it addresses the development of five quotients and the use of audio-visual aids respectively. The paper concludes after discussing the examination and test methodologies, focusing on some project's by-products and project evaluation.

SWOT ANALYSIS

The recognition of internal strengths and weaknesses, as well as external opportunities and threats, takes place on the basis of a SWOT-analysis (Houben et al., 1999). It is always difficult to initiate a project but SWOT analysis is the best solution to get the feasibility of the execution. The authors had a series of formal meetings to discuss the scenario and many informal meetings with the stake holders, especially the parents and children for gathering the information, their concern, vision and opinions about launching the new system.

The following are the outcome of this study's SWOT analysis:

Strengths

- a) Children were over-enthusiastic to see their school.

- b) All the families shared the same view and social status.

- c) Parents were eager but had their apprehensions about the premises, teachers, teaching modules and the curriculum.

- d) A few parents (both mother and father) expressed their willingness to extend their cooperation as teachers.

- e) Mothers were happy to find a place for their kids to be nurtured and learn together.

- f) Parents required a place for having planned sports activities, enabling their children to get out of emotional stress.

- g) Mr. Aamir Raza, a senior PhD student, who has great influence on the foreign students and good PR with the university administration, was associated with the Project.

- h) We traced-out at least three students for each class.

- i) We could hunt at least five teachers (parents) for the school. Amongst them, two were professional teachers and had some teaching experience in school.

- j) The arrival of the new families is expected at the beginning of each academic year.

Weaknesses

- a) The fathers (would-be teachers) were busy in their MS/PhD studies so it may become difficult for them to spare time for teaching at school.

- b) As the number of students were scanty, so it was not possible to offer lucrative package and handsome salary to teachers, if hired.

- c) Teachers (the parents) were no doubt competent in their respective fields but were not professional teachers, especially for the primary school.

- d) A high-price school building and also the necessary expenditures to run the project on the specified standards were not affordable.

Opportunities

- a) University (NPU) administration might help us out by providing suitable premises for the proposed school, educational tools/instruments and necessary furniture.

- b) While selecting teachers from amongst parents, mothers would be given priority, followed by fathers and un-married students, as volunteers.

- c) The services for teaching and administration will be on gratis.

- d) Initially, some registration fee and quite nominal monthly fee should be fixed for running the school system as non-profitable project with voluntary services of parents, as teachers.

- e) The administrative duties could be assigned to the non-teaching parents.

Threats

- a) The administration of NPU, Xian (China) shall not

allow this Project within the university premises, due to their own policies and concerns.

b) In case the university administration does not provide an appropriate place, our running cost would be sky-high thus it would become unmanageable.

c) The honorary teachers may be laid-off and withdrawn from the faculty list, if their performance is not found satisfactory and up-to-mark.

d) Parents might not be satisfied with the curriculum, as dissimilar families would have followed different curriculum. The consensus on curriculum posed one of the big threats to the project health.

e) It was feared that the Project might lose its utility, significance and hype after some time. Therefore, the system should not be an experimental endeavour but a continuous venture.

PROJECT INCEPTION AND EVOLUTION

After undertaking the SWOT analysis, the authors defined the following aims and objectives of the project. The evolution and execution was done accordingly.

Project inception

A. Aim of the project: To develop a Schooling System for the Pakistani children of MS/PhD students within the premises of NPU, with parents as teachers and in the administrative staff, after getting the consensus on curriculum.

B. Kick off meeting: A kick-off meeting was called at the apartment of the first author on January 02, 2010 to thrash-out all matters pertaining to the school and also getting formal approval of all the concerned parents to initiate the Project. The meeting was attended by all parents of prospective school-going children and it was unanimously decided to pursue the Project. Issues related to school building, finances, administration, academics, curriculum and teachers were discussed shabbily. The date for the second meeting was agreed as January 09, 2010. The primary task was to get approval from the NPU Administration.

C. Looking for patronage: The authors visited the high officials of the International Cooperation Office of the University with a detailed-plan of the proposed school. After a series of meetings, the University administration gratefully arranged the two class rooms for the school, in the foreign students' apartments. That was the first achievement for the team to materialize their goal of establishing the school.

D. Team building: On January 09, 2010, the second meeting was held and the information of getting the school space was highly welcomed by all the parents. A great boost steered-up the Project and various committees were formed. The following committees were created and their respective duties were assigned to execute the Project, without any delay:

i) Finance, accounts and audit

- To figure-out the capital/recurring expenditures and calculating the registration and monthly fee, etc.
- To get estimated expenses for utilities, stationery, furniture and other daily routine requirements.
- To collect registration fee so as to meet the initial expenditures.
- To maintain the record of all expenditures.
- To carry-out periodic audit for having a proper check on the judicious utilization of financial resources, funds, donations, gifts, etc.

ii) Procurement and issuance

- To purchase furniture, water dispensers, white boards, stationery and class decoration items.
- To store and issue items, as required by the school, from time-to-time.
- To keep a proper record of purchase and issue for audit purposes.

iii) Academics

- To finalize the curriculum of each class.
- To decide and arrange the course books and work books.
- To coordinate with teachers and to develop the weekly, monthly and term plans.

iv) Administration

- To get the children registered, according to their ages.
- To work-out the seat-plan in two class rooms.
- To name class titles according to the established trends and age groups like, juniors, seniors, advance, Class 1 and Class 2, etc.
- To develop schedules like Time Table and Yearly academic calendar, extra-curricular activities, parents' day, annual awards-giving ceremony etc.
- To arrange the teaching staff for each subject and each class.
- To determine the name of the school, design logo, identity cards, school handbook, uniform, registration forms, prospectus, prepare the contact list of parents and teachers, create yahoo group/website for communication.
- To keep the record of all school activities to be presented on the school annual day.
- To be responsible for project execution in respect of Administration and Academics, both.

Project evolution

There were two to three members in each committee, who with the help of parents and volunteers, resolved all issues within a short span of one week and arrived at the following conclusions:

- School name: The school was named as “Xi’an School System” (XSS), a project of NPU foreign students. Logo was designed with a “Bell Tower” in the centre as it is the land mark of Xi’an, China.

- Communication medium: A yahoo group with the title of xianschoolsystem@yahoo.com was developed for communication between administration, committees, teachers, parents and children.

- Registration: Students were registered through email with the registration fee of 200 CNY (30 USD) and monthly fee of 50 CNY (7 USD).

- Class room allocation: Due to the scarcity of enough space, and availability of only two class rooms, it was decided after long deliberations, that XSS will have two stages, namely Stage-I and Stage-II.

(i) Stage I: Juniors (ages 3-4), 3 students; Seniors (ages 4-5), 2 students.

(ii) Stage II: Advance (ages 5-6), 4 students; Class 1 (ages 6-7), 1 student; Class 2 (ages 7-8), 2 students.

- Curriculum selection: It was decided unanimously to follow the course of OXFORD University Press, Pakistan (http://www.oup.com.pk/pdf/School_Textbooks_and_Library_Books.pdf) as one of the parents had all the books and work books available with them. The material was then got photocopied for distribution before Inaugural session. One copy was made available to the student and the other for the relevant teacher

- Teachers’ choice: The response to an open call for teachers, floated on the yahoo group, was quite encouraging, which generated lot of interest and as a result we got quite a good number of offers. A careful assortment of three female and six male teachers was done, including two volunteers and six parents, all having postgraduate degrees.

- Course development and lecture plans: Teachers were provided with the course material in advance and they developed the weekly, monthly, term wise and yearly plan of their respective subjects, well before the inaugural ceremony.

- Time table: Developing time table was an extra special obligation, due to the class/lecture schedule of the teachers (parents) in their respective departments of the University. In China, 1200 hours – 1400 hours is observed as the lunch/break time, so the school timings were fixed as 1200 hours noon – 1600 hours (Local Time) including 20 minutes break and four lectures per day for stage-I and five lectures per day for stage-II. Saturdays and Sundays were declared as off days. It was decided to have two terms in a year.

- Teacher’s training: As our faculty does not include the professional teachers, a two-day orientation workshop was decided to be arranged with a subject-expert, especially on ‘teachers training’ before the Project is inaugurated.

- Accessories: All the necessary items like furniture, white boards, water dispensers, curtains, stationery, utility units (electricity and water), class decoration with charts and

other support material were purchased and set in the class-rooms, before the inaugural. The activity of decorating the class room was jointly conducted by the parents and students in order to develop the feel of ‘ownership’ amongst them.

THE INAUGURAL

On January 20, 2010, just after eighteen days of the kick-off meeting, Xi’an school system was inaugurated by the Vice Dean and Director of the International Cooperation Office, Northwestern Polytechnical University (NPU), Xian, (China). The school children welcomed the guests and thanked for their patronage by presenting them the bouquet flowers. The school was put to operation and started functioning formally, on the same day. The students were provided books and teachers started their lessons, after the modest celebration party.

ENHANCING THE FIVE QUOTIENTS

The authors envisaged this project as a means to develop and enhance the five basic quotients like: Intelligence, Emotional, Physical, Cultural and Spiritual amongst the children.

- Intelligence quotient: In order to augment the intelligence quotient, Reading, Writing and Arithmetic were given the top priority, while designing the course-content and devising the schedule. “All students must learn to think mathematically, and they must think mathematically to learn” (Kilpatrick et al., 2001). A range of audio-visual games-based and interactive methods were introduced for increasing the students’ understanding and quick comprehension.

- Emotional quotient: The development of this quotient was one of the foremost tasks, as the children were living with their parents in the small apartments with hardly any opportunity for their emotional vent. Their fathers had literally no time for their children, being preoccupied the whole day with their intensive studies at the University. So the children were left with their mothers only. In the past, they had experienced the company of their grandparents, relatives and friends in their home country but now they were feeling alienated and secluded. Consequently, the inter-age behaviour was deteriorating. They were confined to internet games and cartoons. They were becoming the passive viewers and forgetting the part of an active player. Hence, the quotient was thought to be imperative as emotional development, and Xi’an School system provided them a place to interact with their peer-group, for sharing many things while talking and playing together.

- Physical quotient: Games are powerful promoters of intellectual ability (William, 1982). The authors introduced a forty-minute lecture on “ARTS and Fine Arts” each day, for the combined-class both for Stages I and II with a theme of CCTV: Creativity, Communication, Team

Playing, Visualization, etc. This proved to be an inspirational and motivational technique and turned out to be the major attraction for the students as they discovered some new activity, every day. The same class arranged a few physical indoor and/or outdoor games, and also activities like traditional kite flying in China to develop their physical quotients.

- Spiritual and cultural quotient: New culture is always a challenge for everyone but parents are sometimes more afraid of the impact of alien culture on their kids. The parents (foreign students) living in China have to go back to their home country after the completion of their studies, so they are always worried about their kids' future and particularly about forgetting about the values, religion and culture of their own country. In order to overcome this concern, XSS provides religious and cultural education too in order to develop the Spiritual and Cultural quotient.

Various cultural, national and religious days were celebrated at XSS during the last four months in order to keep them aware of their own values and customs. This type of events included quiz competitions, debates, singing, story making, and drama. The activity resulted in various achievements like building self-confidence and developing imagination amongst the children, inculcating in them a sense of healthy competition and the concept of strenuous efforts, and experiencing the taste of winning and losing, to fight against stage-fear syndrome, to make themselves aware of the different genres of arts and learning.

Some excursion trips were also arranged for gaining first-hand knowledge, to enhance their vision and information about the culture and history of China – the country they are currently residing in.

The authors witnessed a phenomenal change in the behaviour, attitudes and skills of children, in these four months, while gathering statistics through various questionnaires/surveys conducted at the initial stage of the school-start, middle and at the end of first term.

AUDIO VIDEO AID/SUPPORT

Xi'an School System has utilized various audio video supports as teaching techniques in making the learning process more attractive. Some language-teachers used them for phonetics and visualization. The teacher of mathematics used internet for making maths as a fun. The teacher of Social Studies and General Science made use of it for elaborating concepts in a more fascinating manner. The arts teacher applied it for viewing cartoons, animated movies and comedy serials, in the joint-sessions.

THE TESTS AND EXAMINATION

The basic purpose of setting-up the XSS was to prepare the students according to the curriculum currently prevalent in Pakistan, so that on their return they can

easily be adjusted and cope-up with the existing educational standards there. Since the parents are performing the duties of teaching at XSS, so their sincerity and commitment was observed at high order. They were given full autonomy to design their courses, lectures, teaching methodologies and examination/test patterns. They took quarterly tests to gauge the level of understanding and status of students' work, accordingly. They developed and used diverse work sheets to generate the interest of the students. The Term Exam was taken after three and a half months of regular studies. The results were incredible as compared to the status of students at the commencement of school system.

PROJECT BY-PRODUCTS

The by-products of the Xi'an School System were over whelming. School provided a unique opportunity for the families to interact with one another, which resulted in the strong community integration and cemented the bond. Due to language and cultural barrier outside their community, the mothers of the children were feeling boredom with their home routines, before the initiation of this Project. Now, they got enormous chance to share in the school activities and got a set routine for their kids and family.

The children got a feel of schooling, the proper timings and class-discipline, the quest of learning, the work-load scenario and above all learning something new each day by different teachers. The school also provided a cure to the home sickness syndrome for the mothers of the children as they found more productive business. The fathers, on the other hand, got relaxed and involved themselves with more concentration in their research and studies, as they were always concerned and upset about the education of their children.

PROJECT EVALUATION

Successful project management ensures the completion of project in time, within budget, and to the project specifications (Babu and Nalina, 1996). The Xi'an School System has completed its first term of four months till the writing of this paper and the authors have found no key issue during this period. The attendance record of students and teachers invariably remained above 95%. The discrepancy, if any, was only due to some legitimate reasons. The drop-out rate was zero percent and the surveys about the five Qs at various stages show an exceptional improvement in children.

CONCLUSIONS

Xi'an School System was conceived as a community-based schooling system for the children of the Pakistani students, studying in Northwestern Polytechnical

University, Xian, China. The purpose was to prepare the children for the Pakistani Schooling System, when they go back to their country of origin. The school is a community-based project run by the foreign students and their families at a cost of only USD 7 per month per kid as the tuition fee. The parents are themselves teachers on voluntary basis and the school building is provided by the NPU administration. XSS was developed on the theme of win-win paradigm for all the stake holders. The school has completed its first four months with a noticeable and remarkable change in the five Qs of the children.

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